

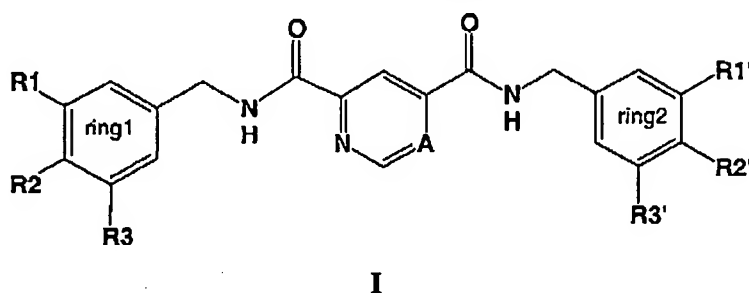
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PROCEDURE PURSUANT TO
37 CFR § 1.116Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A compound of formula I:



wherein

A is a ~~carbon atom~~ or nitrogen atom;

R1 and R3 are independently selected from the group consisting of

hydrogen,

halogen,

-(C₁-C₄)-alkyl, in which alkyl is unsubstituted or substituted once, twice or three times by halogen,

-O-(C₁-C₄)-alkyl, in which alkyl is unsubstituted or substituted once, twice or three times by halogen,

-C(O)-O-R₄,

-CN,

-N(R₅)-(R₆),

-OH,

-S-(C₁-C₄)-alkyl,

-S(O)-(C₁-C₄)-alkyl and

-S(O)₂-R₇, and

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R2 is selected from the group consisting of

hydrogen,

halogen,

-(C₁-C₄)-alkyl,

-O-(C₁-C₄)-alkyl,

-C(O)-O-R₄,

-CN,

-N(R₅)-(R₆),

-OH,

-S-(C₁-C₄)-alkyl,

-S(O)-(C₁-C₄)-alkyl and

-S(O)₂-R₇; or R1 and R2, taken together with the two carbon atoms of

ring1 to which R1 and R2 are attached, form a 5- or 6-membered ring which is aromatic or saturated and contains zero, one or two heteroatoms which are independently oxygen, nitrogen and sulfur while R₃ is as defined above; or R2 and R₃, taken together with the two carbon atoms of ring1 to which R2 and R₃ are attached, form a 5- or 6-membered ring which is aromatic or saturated and contains zero, one or two heteroatoms which are independently oxygen, nitrogen and sulfur while R₁ is not part of a ring and is as defined above;

R1' and R3' are independently selected from the group consisting of

hydrogen,

halogen,

-(C₁-C₄)-alkyl, in which alkyl is unsubstituted or substituted once, twice or three times by halogen,

-O-(C₁-C₄)-alkyl, in which alkyl is unsubstituted or substituted once, twice or three times by halogen,

-C(O)-O-R₄,

-CN,

-N(R₅)-(R₆),

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-OH,
-S-(C₁-C₄)-alkyl,
-S(O)-(C₁-C₄)-alkyl and
-S(O)₂-R₇, and

R₂' is selected from the group consisting of

hydrogen,
halogen,
-(C₁-C₄)-alkyl,
-O-(C₁-C₄)-alkyl,
-C(O)-O-R₄,
-CN,
-N(R₅)-(R₆),
-OH,
-S-(C₁-C₄)-alkyl,
-S(O)-(C₁-C₄)-alkyl and

-S(O)₂-R₇; or R₁' and R₂', taken together with the two carbon atoms of

ring2 to which R₁' and R₂' are attached, form a 5- or 6-membered ring which is aromatic or saturated and contains zero, one or two heteroatoms which are independently oxygen, nitrogen and sulfur while R₃' is as defined above; or R₂' and R₃', taken together with the two carbon atoms of ring2 to which R₂' and R₃' are attached, form a 5- or 6-membered ring which is aromatic or saturated and contains zero, one or two heteroatoms which are independently selected from the group consisting of oxygen, nitrogen and sulfur while R₁' is not a number of a ring and is as defined above;

R₄ is hydrogen or -(C₁-C₄)-alkyl;

R₅ and R₆ are independently selected from the group consisting of

hydrogen,
-(C₁-C₄)-alkyl,

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-C(O)-(C1-C4)-alkyl and

-SO₂-(C1-C4)-alkyl; and

R7 is selected from the group consisting of

-(C1-C4)-alkyl,

-OH and

-NH₂;

a stereoisomeric form of the compound of formula I, a mixture of two or more stereoisomeric forms of the compound of formula I, or a physiologically tolerated salt of the compound of formula I,

provided that at least one of the radicals R1, R2, R3, R1', R2', R3' is not selected from the group consisting of hydrogen, halogen, nitro, -(C1-C4)-alkyl and -O-(C1-C4)-alkyl.

2. (Canceled)

3. (Previously Presented) A compound of claim 1, wherein R1, R3, R1', R3' are not selected from the group consisting of halogen, unsubstituted -(C1-C4)-alkyl and unsubstituted -O-(C1-C4)-alkyl except when there is a 5- or 6-membered ring formed between R1 and R2, or between R2 and R3, or between R1' and R2', or between R2' and R3', then R1, R3, R1', R3' are the same as defined in claim 1.

4. (Original) A compound of claim 1, wherein R1, R3, R1', and R3' are independently selected from the group consisting of hydrogen, chlorine, fluorine, trifluoromethyl, methoxy, methyl, -C(O)-OH, -C(O)-O-CH₃, -CN, -NH₂, -NH-C(O)-CH₃, -NH-SO₂-CH₃, -N-(CH₃)₂, -SO₂-NH₂, -OH, -O-CH₂-(CHF₂), -S-CH₃, -S(O)-CH₃, -S(O)₂-CH₃ and bromine; and R2 and R2' are independently selected from the group consisting of hydrogen, chlorine, fluorine, methoxy, methyl, bromine, -C(O)-OH, -C(O)-O-CH₃, -CN, -NH₂, -NH-C(O)-CH₃, -NH-SO₂-CH₃, -N-(CH₃)₂, -SO₂-NH₂, -OH, -O-CH₂-(CHF₂), -S-CH₃, -S(O)-CH₃ and -S(O)₂-CH₃; or

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R1 and R2, R2 and R3, R1' and R2', or R2' and R3', together with the two carbon atoms of ring1 or ring2 to which R1 and R2, R2 and R3, R1' and R2', or R2' and R3', respectively, are attached, form a dioxolane, dihydrofuran or furan ring, and any R1, R2, R3, R1', R2', or R3' that is not a member of said dioxolane, dihydrofuran or furan ring is the same as defined in the first part of this claim.

5. (Original) A compound of claim 1, wherein R1, R3, R1', and R3' are independently selected from the group consisting of hydrogen, -(C1-C4)-alkyl, in which alkyl is substituted once, twice or three times by halogen, and -O-(C1-C4)-alkyl, in which alkyl is substituted once, twice or three times by halogen, and R2 and R2' are independently selected from the group consisting of hydrogen, halogen, -O-(C1-C4)-alkyl, and -(C1-C4)-alkyl; or

R1 and R2, R2 and R3, R1' and R2', or R2' and R3', together with the two carbon atoms of ring1 or ring2 to which R1 and R2, R2 and R3, R1' and R2', or R2' and R3', respectively, are attached, form a 5- or 6-membered ring which is aromatic or saturated and contains zero, one or two heteroatoms which are independently selected from the group consisting of oxygen, nitrogen and sulfur, and any R1, R2, R3, R1', R2', or R3' that is not a member of said a 5- or 6-membered ring is independently selected from the group consisting of hydrogen, halogen, -(C1-C4)-alkyl, in which alkyl is unsubstituted or substituted once, twice or three times by halogen, and -O-(C1-C4)-alkyl, in which alkyl is unsubstituted or substituted once, twice or three times by halogen.

6. (Original) A compound of claim 1, wherein R1, R3, R1', and R3' are independently selected from the group consisting of hydrogen and trifluoromethyl, and R2 and R2' are independently selected from the group consisting of hydrogen, chlorine, fluorine, methoxy and methyl; or

R1 and R2, R2 and R3, R1' and R2', or R2' and R3', together with the two carbon atoms of ring1 or ring2 to which R1 and R2, R2 and R3, R1' and R2', or R2' and R3', respectively, are attached, form a dioxolane, dihydrofuran or furan ring, and any R1, R2, R3, R1', R2', or R3' that is not a member of said dioxolane, dihydrofuran or furan ring is

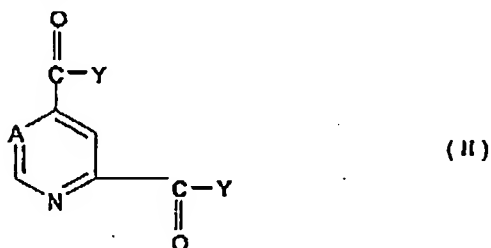
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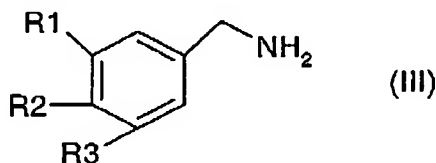
independently selected from the group consisting of hydrogen, chlorine, fluorine, trifluoromethyl, methoxy, and methyl.

7. (Original) A process for preparing the compound of formula I as defined in Claim 1, comprising:

reacting a compound of formula II



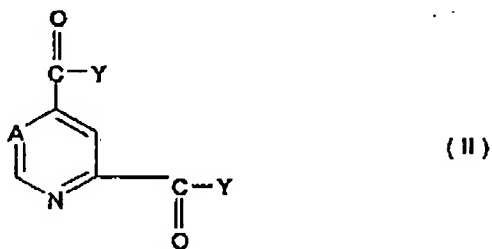
with a compound of formula III



wherein R1, R2 and R3 have the meanings given in claim 1 and Y is halogen, hydroxyl or -(C₁-C₄)-alkoxy or, together with the carbonyl group to which Y is attached, forms an active ester or a mixed anhydride, to afford a compound of formula I defined in claim 1.

8. (Original) A process for preparing the compound of formula I as defined in Claim 1, comprising:

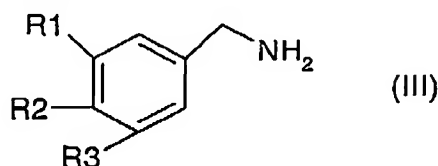
reacting a compound of formula II



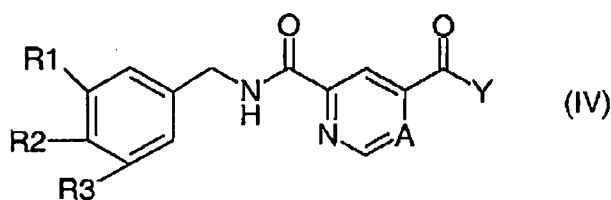
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with a compound of formula III



wherein R1, R2 and R3 have the meanings given in claim 1 and Y is halogen, hydroxyl or -(C₁-C₄)-alkoxy or, together with the carbonyl group to which Y is attached, forms an active ester or a mixed anhydride, to afford an intermediate compound of formula IV



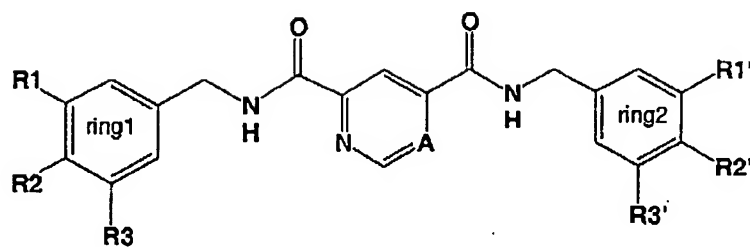
; and

reacting said intermediate compound of formula IV with a compound of formula III to afford a compound of formula I as defined in claim 1.

9. (Original) A pharmaceutical composition which comprises an effective amount of at least one compound of claim 1 together with a pharmaceutically suitable and physiologically tolerated carrier substance.
10. (Original) A pharmaceutical composition which comprises an effective amount of at least one chemical entity of claim 2 together with a pharmaceutically suitable and physiologically tolerated carrier substance.
11. (Currently Amended) A method for therapy of a disease which is a degenerative joint disease, or a disease of the connective tissues, ~~or a chronic disease of locomotor system by using a~~ comprising administering the a compound of formula I ~~or a related chemical entity of the compound as defined in claim 2;~~

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I

wherein

A is a ~~carbon atom~~ or nitrogen atom;

R1 and R3 are independently selected from the group consisting of

hydrogen,
halogen,
-(C₁-C₄)-alkyl, in which alkyl is unsubstituted or substituted once, twice
or three times by halogen,
-O-(C₁-C₄)-alkyl, in which alkyl is unsubstituted or substituted once,
twice or three times by halogen,
-C(O)-O-R₄,
-CN,
-N(R₅)-(R₆),
-OH,
-S-(C₁-C₄)-alkyl,
-S(O)-(C₁-C₄)-alkyl and
-S(O)₂-R₇, and

R2 is selected from the group consisting of

hydrogen,
halogen,
-(C₁-C₄)-alkyl,
-O-(C₁-C₄)-alkyl,
-C(O)-O-R₄,

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-CN,

-N(R5)-(R6),

-OH,

-S-(C₁-C₄)-alkyl,

-S(O)-(C₁-C₄)-alkyl and

-S(O)₂-R7; or R1 and R2, taken together with the two carbon atoms of

ring1 to which R1 and R2 are attached, form a 5- or 6-membered ring which is aromatic or saturated and contains zero, one or two heteroatoms which are independently selected from the group consisting of oxygen, nitrogen and sulfur while R3 is as defined above; or R2 and R3, taken together with the two carbon atoms of ring1 to which R2 and R3 are attached, form a 5- or 6-membered ring which is aromatic or saturated and contains zero, one or two heteroatoms which are independently selected from the group consisting of oxygen, nitrogen and sulfur while R1 is not part of a ring and is as defined above;

R1' and R3' are independently selected from the group consisting of

hydrogen,

halogen,

-(C₁-C₄)-alkyl, in which alkyl is unsubstituted or substituted once, twice or three times by halogen,

-O-(C₁-C₄)-alkyl, in which alkyl is unsubstituted or substituted once, twice or three times by halogen,

-C(O)-O-R4,

-CN,

-N(R5)-(R6),

-OH,

-S-(C₁-C₄)-alkyl,

-S(O)-(C₁-C₄)-alkyl and

-S(O)₂-R7, and

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R2' is selected from the group consisting of

hydrogen,

halogen,

-(C₁-C₄)-alkyl,

-O-(C₁-C₄)-alkyl,

-C(O)-O-R₄,

-CN,

-N(R₅)-(R₆),

-OH,

-S-(C₁-C₄)-alkyl,

-S(O)-(C₁-C₄)-alkyl and

-S(O)₂-R₇; or R₁' and R₂', taken together with the two carbon atoms of

ring2 to which R₁' and R₂' are attached, form a 5- or 6-membered ring which is aromatic or saturated and contains zero, one or two heteroatoms which are independently oxygen, nitrogen and sulfur while R₃' is as defined above; or R₂' and R₃', taken together with the two carbon atoms of ring2 to which R₂' and R₃' are attached, form a 5- or 6-membered ring which is aromatic or saturated and contains zero, one or two heteroatoms which are independently selected from the group consisting of oxygen, nitrogen and sulfur while R₁' is not a number of a ring and is as defined above;

R₄ is hydrogen or -(C₁-C₄)-alkyl;

R₅ and R₆ are independently selected from the group consisting of

hydrogen,

-(C₁-C₄)-alkyl,

-C(O)-(C₁-C₄)-alkyl and

-SO₂-(C₁-C₄)-alkyl; and

R₇ is selected from the group consisting of

-(C₁-C₄)-alkyl,

-OH and

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-NH_2 ;

a stereoisomeric form of the compound of formula I, a mixture of two or more stereoisomeric forms of the compound of formula I, or a physiologically tolerated salt of the compound of formula I,

provided that at least one of the radicals R1, R2, R3, R1', R2', R3' is not selected from the group consisting of hydrogen, halogen, nitro, $\text{-(C}_1\text{-C}_4\text{)-alkyl}$ and $\text{-O-(C}_1\text{-C}_4\text{)-alkyl}$.

12. (Currently Amended) A method for therapy of a degenerative joint disease comprising administering by using a compound of formula I as defined in claim 1 or a related chemical entity of the compound as defined in claim 2.
13. (Currently Amended) A method according to claim 12, wherein said formula I is as defined in claim 3 R1, R3, R1', R3' are not selected from the group consisting of halogen, unsubstituted $\text{-(C}_1\text{-C}_4\text{)-alkyl}$ and unsubstituted $\text{-O-(C}_1\text{-C}_4\text{)-alkyl}$ except when there is a 5- or 6-membered ring formed between R1 and R2, or between R2 and R3, or between R1' and R2', or between R2' and R3'.
14. (Currently Amended) A method according to claim 12, wherein said formula I is as defined in claim 4 R1, R3, R1', and R3' are independently selected from the group consisting of hydrogen, chlorine, fluorine, trifluoromethyl, methoxy, methyl, -C(O)-OH , -C(O)-O-CH_3 , -CN , -NH_2 , -NH-C(O)-CH_3 , $\text{-NH-SO}_2\text{-CH}_3$, $\text{-N(CH}_3\text{)}_2$, $\text{-SO}_2\text{-NH}_2$, -OH , $\text{-O-CH}_2\text{-(CHF}_2\text{)}$, -S-CH_3 , -S(O)-CH_3 , $\text{-S(O)}_2\text{-CH}_3$, and bromine; and
R2 and R2' are independently selected from the group consisting of hydrogen, chlorine, fluorine, methoxy, methyl, bromine, -C(O)-OH , -C(O)-O-CH_3 , -CN , -NH_2 , -NH-C(O)-CH_3 , $\text{-NH-SO}_2\text{-CH}_3$, $\text{-N(CH}_3\text{)}_2$, $\text{-SO}_2\text{-NH}_2$, -OH , $\text{-O-CH}_2\text{-(CHF}_2\text{)}$, -S-CH_3 , -S(O)-CH_3 and $\text{-S(O)}_2\text{-CH}_3$; or R1 and R2, R2 and R3, R1' and R2', or R2' and R3', together with the two carbon atoms of ring1 or ring2 to which R1 and R2, R2 and R3, R1' and R2', or R2' and R3', respectively, are

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attached, form a dioxolane, dihydrofuran or furan ring, and any R1, R2, R3, R1', R2', or R3' that is not a member of said dioxolane, dihydrofuran or furan ring is as previously defined.

15. (Currently Amended) A method according to claim 12, wherein ~~said formula I is as defined in claim 5~~ R1, R3, R1', and R3' are independently selected from the group consisting of hydrogen, -(C₁-C₄)-alkyl, in which alkyl is substituted once, twice or three times by halogen, and -O-(C₁-C₄)-alkyl, in which alkyl is substituted once, twice or three times by halogen, and R2 and R2' are independently selected from the group consisting of hydrogen, halogen, -O-(C₁-C₄)-alkyl, and -(C₁-C₄)-alkyl; or
R1 and R2, R2 and R3, R1' and R2', or R2' and R3', together with the two carbon atoms of ring1 or ring2 to which R1 and R2, R2 and R3, R1' and R2', or R2' and R3', respectively, are attached, form a 5- or 6-membered ring which is aromatic or saturated and contains zero, one or two heteroatoms which are independently selected from the group consisting of oxygen, nitrogen and sulfur, and any R1, R2, R3, R1', R2', or R3' that is not a member of said a 5- or 6-membered ring is independently selected from the group consisting of hydrogen, halogen, -(C₁-C₄)-alkyl, in which alkyl is unsubstituted or substituted once, twice or three times by halogen, and -O-(C₁-C₄)-alkyl, in which alkyl is unsubstituted or substituted once, twice or three times by halogen.
16. (Currently Amended) A method according to claim 12, wherein ~~said formula I is as defined in claim 6~~ R1, R3, R1', and R3' are independently selected from the group consisting of hydrogen and trifluoromethyl, and R2 and R2' are independently selected from the group consisting of hydrogen, chlorine, fluorine, methoxy and methyl; or
R1 and R2, R2 and R3, R1' and R2', or R2' and R3', together with the two carbon atoms of ring1 or ring2 to which R1 and R2, R2 and R3, R1' and R2', or R2' and R3', respectively, are attached, form a dioxolane, dihydrofuran or furan ring, and

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any R1, R2, R3, R1', R2', or R3' that is not a member of said dioxolane, dihydrofuran or furan ring is independently selected from the group consisting of hydrogen, chlorine, fluorine, trifluoromethyl, methoxy, and methyl.

17. (Canceled)
18. (Previously Presented) A method according to claim 17, wherein said degenerative joint disease is osteoarthroses, osteoarthritis, spondyloses, chondrolysis following joint trauma or a relatively long period of joint immobilization following injuries to the meniscus or patella or tearing of a ligament.
19. (Currently Amended) A method according to claim 11, wherein said disease is a disease of connective tissues.
20. (Currently Amended) A method according to claim 19, wherein said disease of connective tissue is collagenoses, periodontal diseases and or wound healing disturbances.
21. (Canceled)
22. (Canceled)
23. (Currently Amended) A method of treatment for breast cancer by using a compound of formula I as defined in claim 1 ~~or a related chemical entity of claim 2.~~